Family & Social Services Administration

Division of Technology Services

VISION

Office of Architecture & Standards

FSSA IT VISION

- Driven By Business Needs and Requirements
- Customer/Client Focused
- Provide Information Sharing, Integrated, and Secure IT Environment
- Provide Quality IT Services
- Provide Well Trained IT Staff

Our Business Environment

- High Degree of Federal Involvement
  - Regulations
  - Controls
  - Audits
  - No Proprietary Systems
- High Degree of Compartmentalized Funding
- Budget Constraints
- Demand is Externalized (Not Controlled by Us)
  - Politics
  - Demographics
  - Law
  - Economic
- Election Cycles
- Dynamic Organization

Business Goals for FSSA

- Creating Good Paying Jobs for All Hoosiers
- Assuring All Children Have Access to Quality Health Care and World Class Education
- Making Sure Seniors and People with Disabilities and the Disadvantaged Have the Independence and Support that they Need
- Protecting the Safety of our Citizens from Threats Both Inside and Outside the State
- Enhancing the Quality of Life and the Quality of Place for All Hoosiers

Business Model – "AS IS"

- Administration Organized by Function
- Programs Organized by Division
- Information Systems are Micro-cosmic and specific to the Program Area
- Budget and Funding Specific to Program Area
- Systems of Collaboration In Place, but are Limited by Environmental Factors

Business Model – "TO BE"

- Processes that Align Services by Function
- Information Systems that Deliver Common Processes
- Integrated High Quality Data that is Performance and Control Driven
- Efficient Portfolio of Processes
- Risk Mitigation

Business Driven Approach to VISION Development

- Technical Support of FSSA, Division, Bureau/Office, and Program Goals and Initiatives
- Must Be Client/Customer Friendly
- Business Units are Our Customers
- Be Flexible to Change
- Promote Partnering between Our Customers and DTS

DTS Guiding Principles

- Be Business Driven
- Be Cost Effective
- Be Timely
- Be Responsive To Change
- Create Integrated Systems
- Protect Data As A Valuable Asset
- Quality Outcomes

DTS Direction

- Provide Quality High Speed Networks
- Manage Hardware/Software/Applications
- Support Technology Needed For Staff and Business Partners

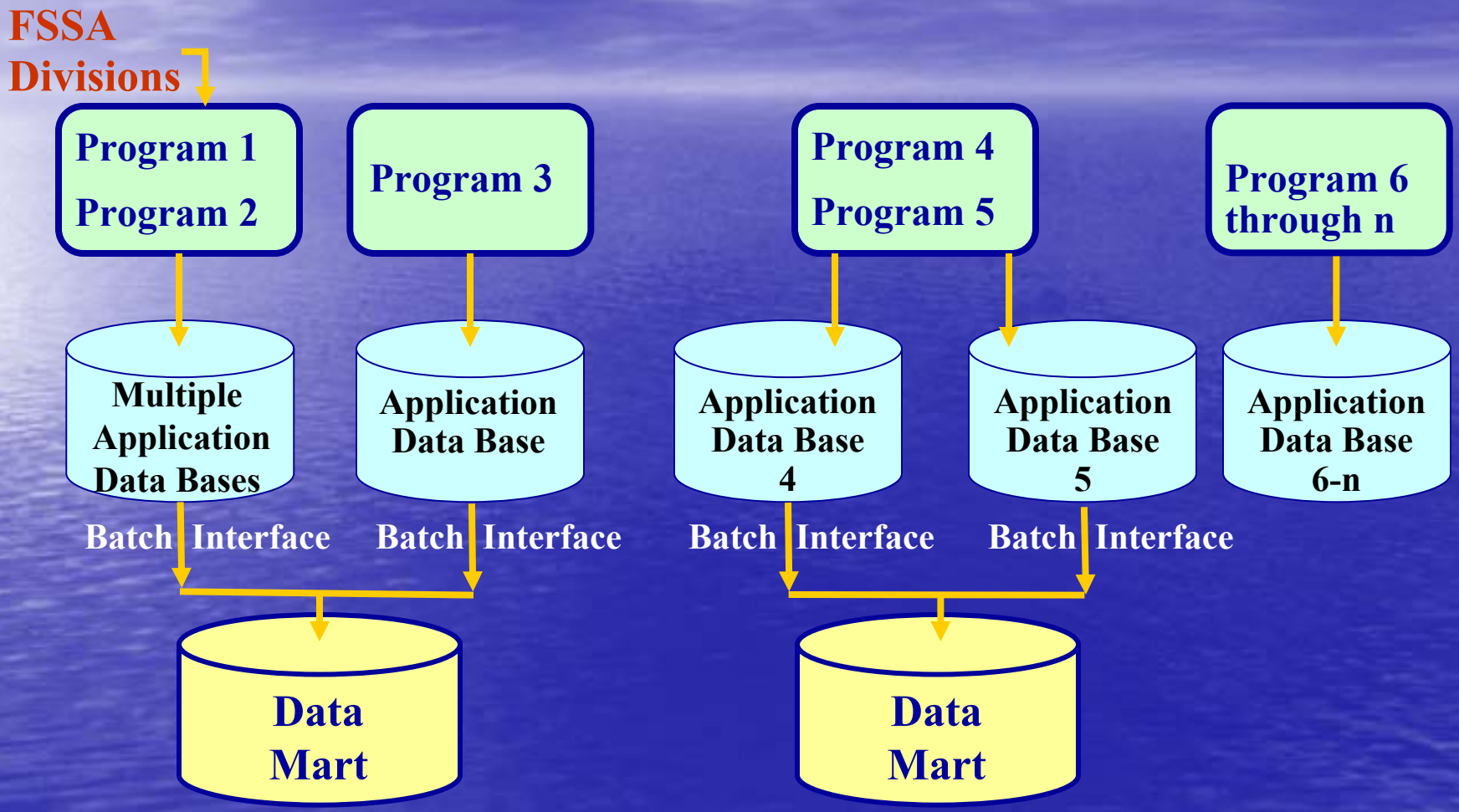
VISION Sections

- Applications Architecture
- Information (Data/Database) Architecture
- Operational Technology Architecture

Applications Architecture Direction

- Maintain and Enhance Technical Infrastructure
- Integrate Applications
- Fulfill Data Access and Security Requirements
- Paper-Based to Web-Based Processes
- Strengthen Web as Delivery System
- Standardize Access to Data and Information
- Leverage Legacy Systems

Application Architecture – "AS IS"

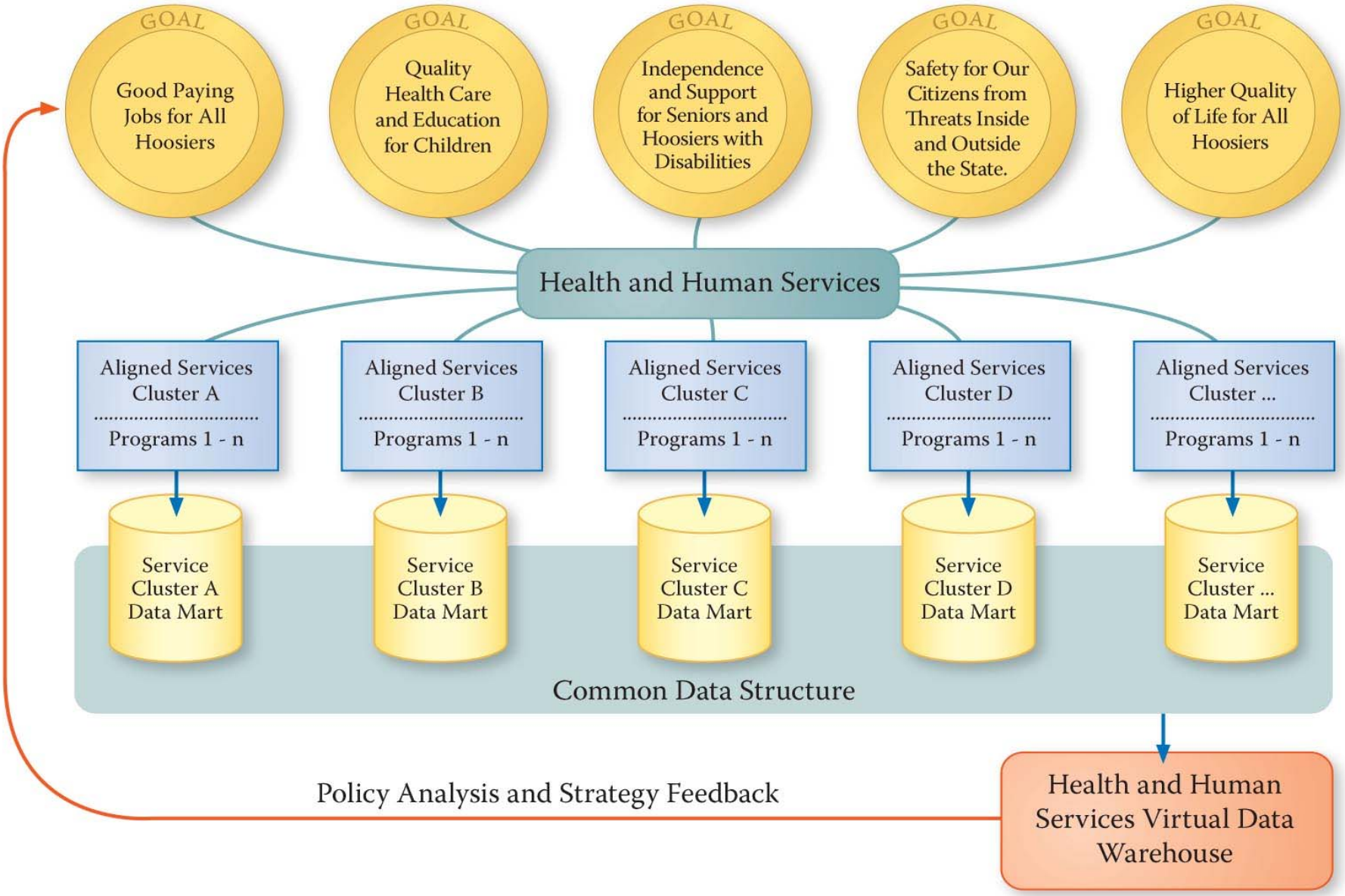


No common Data Structures
No Virtual Data Warehouse

Applications Architecture "AS IS"

- Many Applications which Support a Single Program
- High Degree of Heterogeneous Tools and Technologies
- 20+ Systems Supply Data to Data Warehouse
- Few Systems using Web-Publishing
- Few Browser/Web-Based
- Connection Via Emulation and Middleware

Integrating Aligned Services



Application Architecture – "TO BE"

- Deliver Applications that are Business Driven, Affordable, Scaleable, Maintainable, Adaptable to Change, and Portable across Platforms
- Promote Partnering between Business Units and IT
- Leverage Modern Technology Tools
- Leverage Statewide Technology Initiatives

Application Architecture Strategies

- Browser Front-End Legacy Systems
- Use Data Warehousing Technologies to Create Common Reporting Environment
- Build and Maintain Agency-wide Development Environment which Feature Re-Useable components
- Migrate to Browser-based Applications

Application Architecture Strategies (Continued)

- Application Development Environment – Component/Modular
- Anytime, Anywhere Access to:
  - All Systems (Inside or Outside State)
  - Information (Inside or Outside State)
  - Office Automation (Word Processing, E-Mail, Scheduling, and Spreadsheet)
  - Web (Internet and Intranet)
- Implement Job Function Portal Approaches

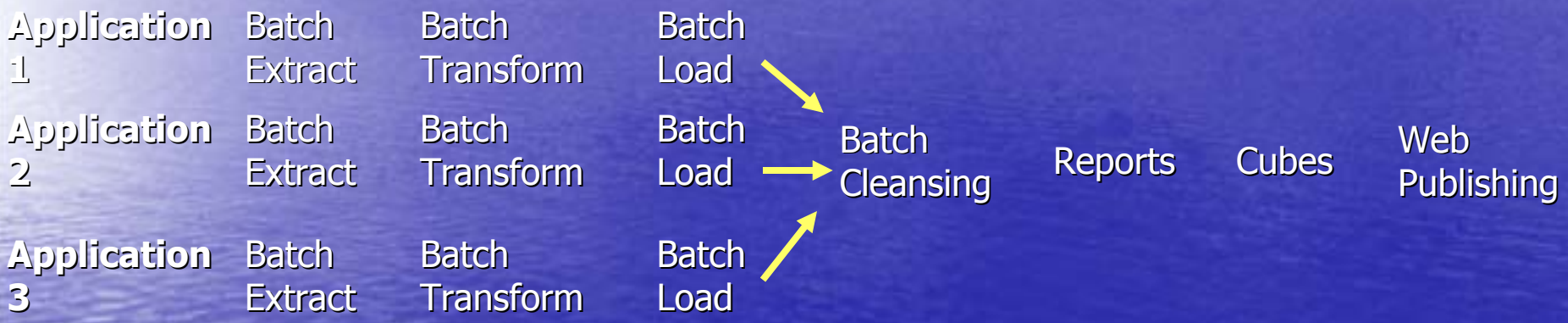
Application Architecture Strategies (Continued)

- Document Management – Workflow, Electronic Signature, Approval Routing
- Integrate Systems that are in the Same Benefit Chain Managed by a Single Case Worker (e.g. TANF, Food Stamps, IMPACT)

Information Architecture Direction

- Collect and Share Information Across All Programs
- Improve Data Accessibility For the Agency and Business Partners
- Implement Security and Privacy Requirements

Information Architecture– "AS IS"



Data Administration:

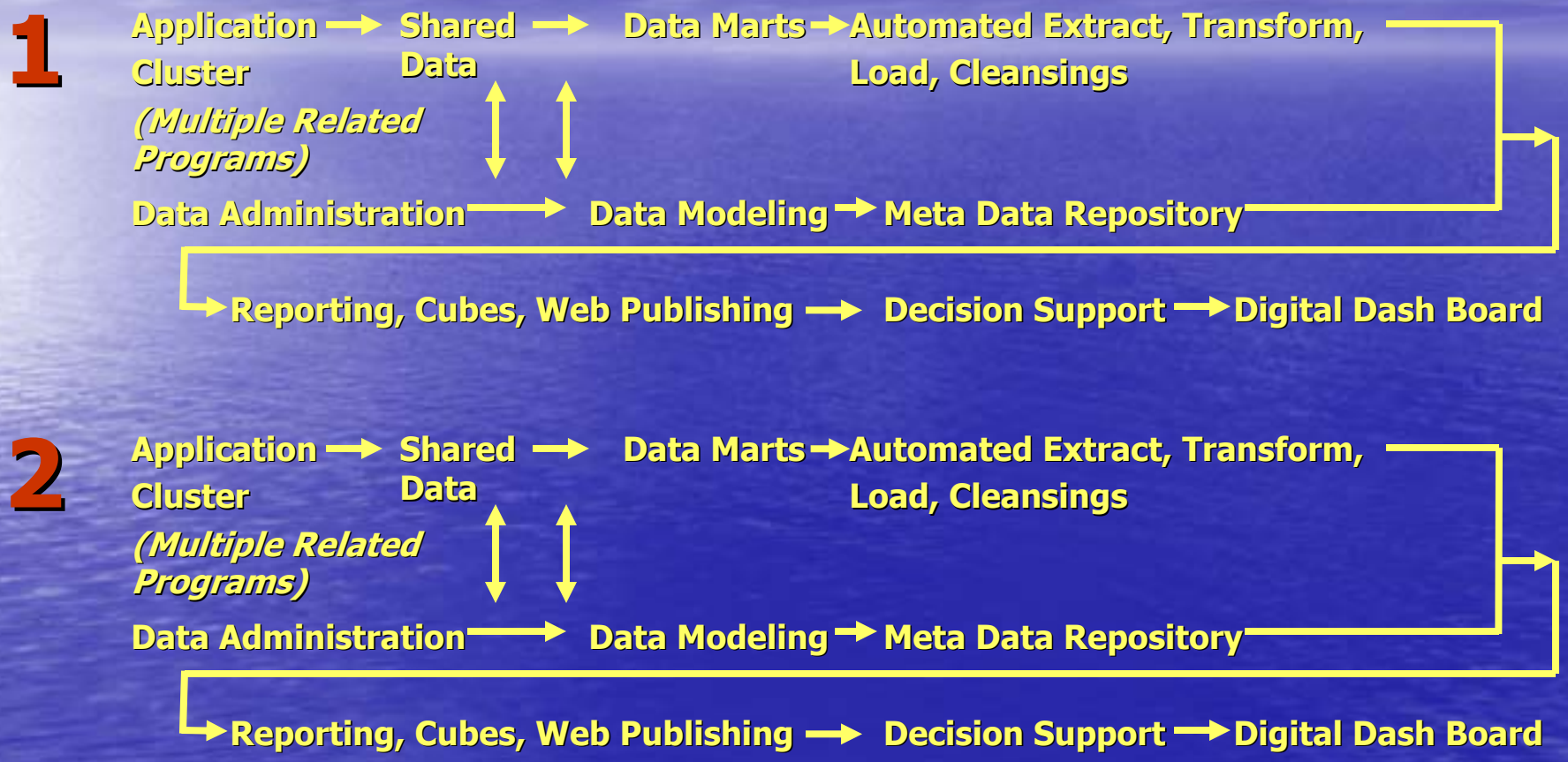
- Some Modeling
- Little Meta Data
- One Data Administrator

Information Architecture – "AS IS"

- Some Policies, Guidelines, Standards in Place
- Tools in Place – Cognos and Ascential Suites, Modeling
- Starting Meta-Data and Extract, Transform, Load Processes
- Data Warehouse Tools in Use by TANF, ICES, Mental Health, Financial, and Audit

Information Architecture– "TO BE"

Right Data, Right Time, Right Place



Virtual Enterprise Data Warehouse Accessing Multiple Data Marts

Information Architecture – "TO BE"

- Provide and Implement Tools, Procedures, and Policies to Manage Information as a Valuable Resource
- Be Responsive to Change
- Plan and Implement Data Integration
- Improve Data Access, Sharing, Quality, and Security
- Expand and Implement Data Standards for Defining, Using, Sharing Information

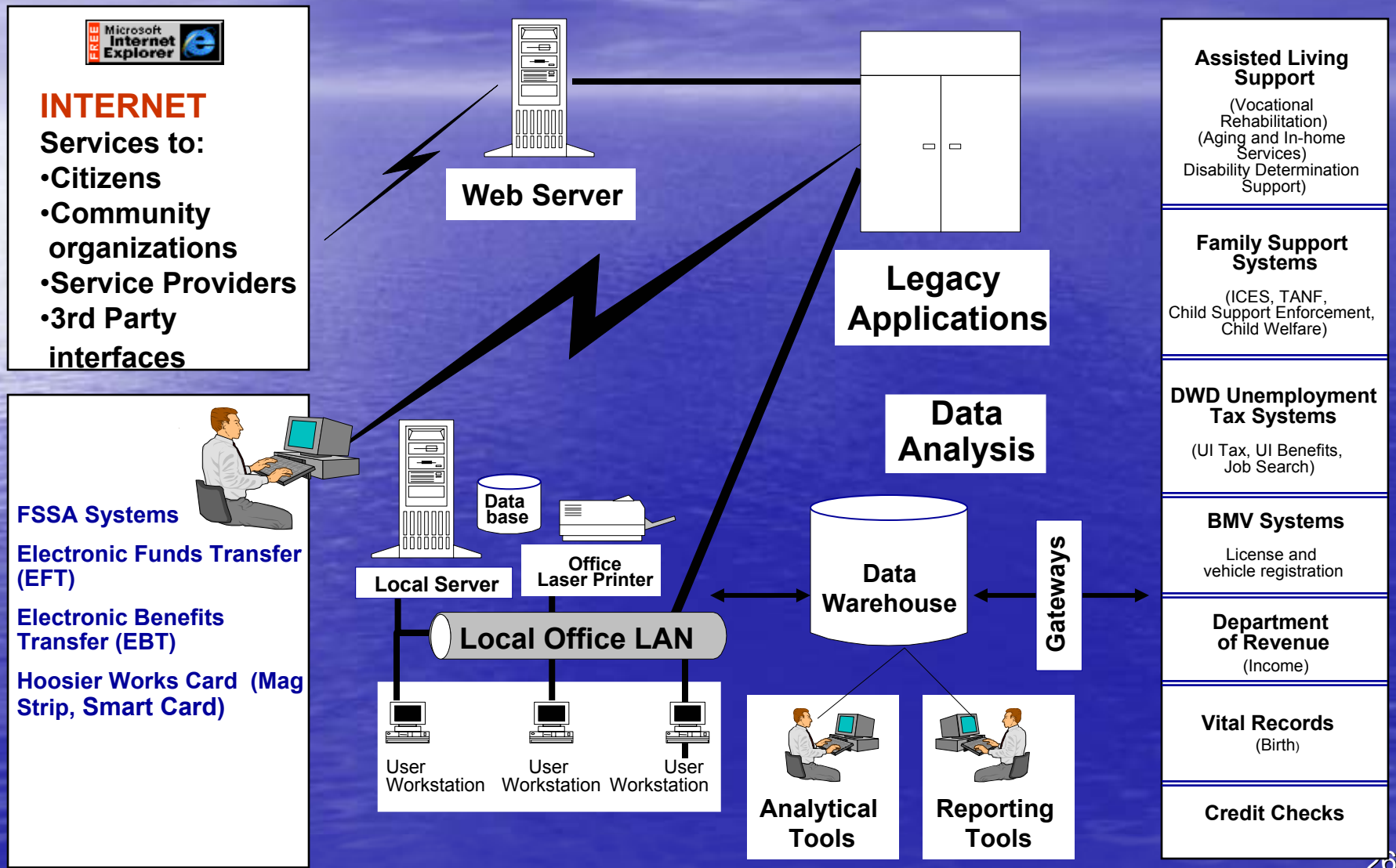
Information Architecture Strategies

- Expand Use of Centralized Meta-Data Repository that Stores and Organizes Information about our Data
- Expand Use of Data Modeling to Support Integrated Data Environment
- Implement Common Client Index
- Implement Electronic Document Management

Information Architecture Strategies (Continued)

- Expand Data Warehouse Principles to Support Agency-wide (Virtual Data Warehouse) Reporting, Decision Support, and Digital Dash Board Policies
- Implement GIS Technologies
- Empower Users with Expanded Capabilities
- Provide Secure and Protected Data Environment

Operational Architecture – "AS IS"

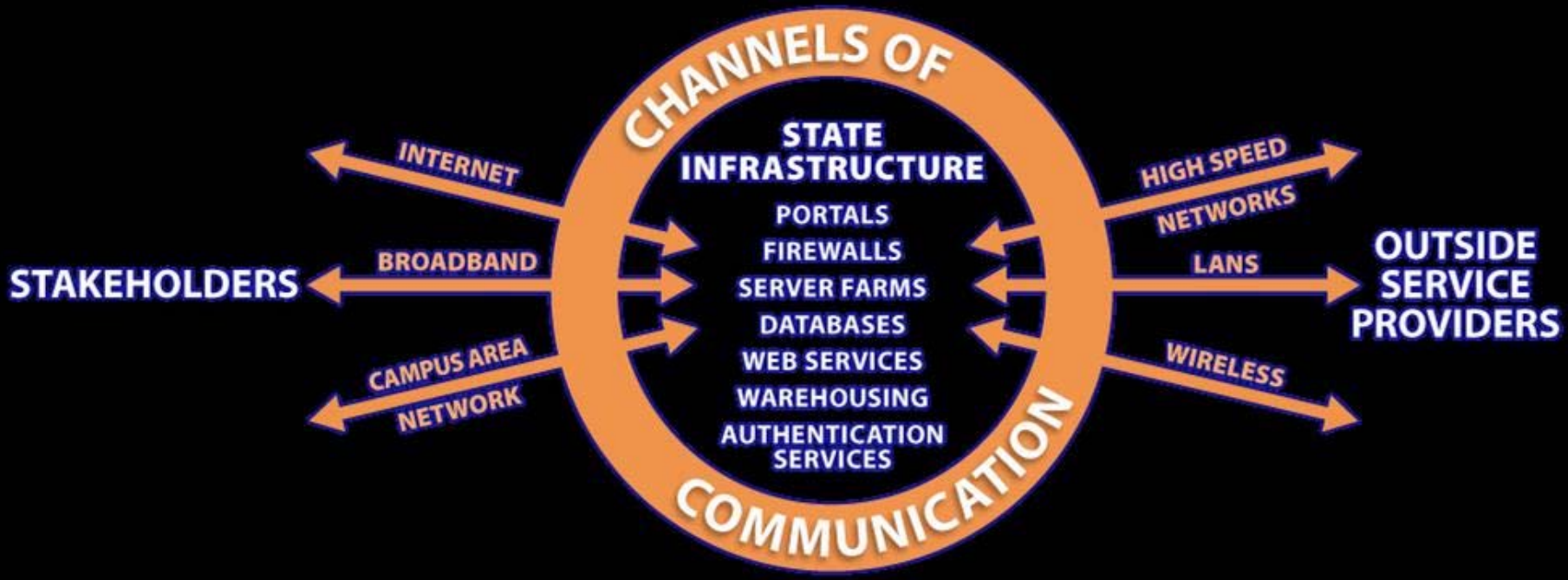


Operational Technology Architecture – "AS IS"

- Networks and Service Operations have Infrastructure and Processes in Place to Leverage into the Future
- Standards and Total Cost of Ownership Driven
- High Degree of Fault Tolerance
- Limited Voice Over IP Capability, but have Piloted
- Limited Video and Video Conferencing Capability, but can be Leveraged

Operational Architecture – "TO BE"

Anytime, Anywhere Computing



Operational Architecture – "TO BE"

- Create Robust Infrastructure that Supports Anytime/Anywhere Computing
- Continue to be Standards-Based and Total Cost of Ownership Driven
- Increase Continuity of Operation
- Implement Disaster Response and Business Recovery
- Improve Technology Refresh Cycles

Operational Architecture – "TO BE" (Continued)

- Be Flexible and Adaptable to Change
- Provide Infrastructure that Meets Current Needs and Be Scaleable to Support Future Needs
- Leverage Existing Technologies to Fulfill New Business Requirements

Operational Architecture Strategies

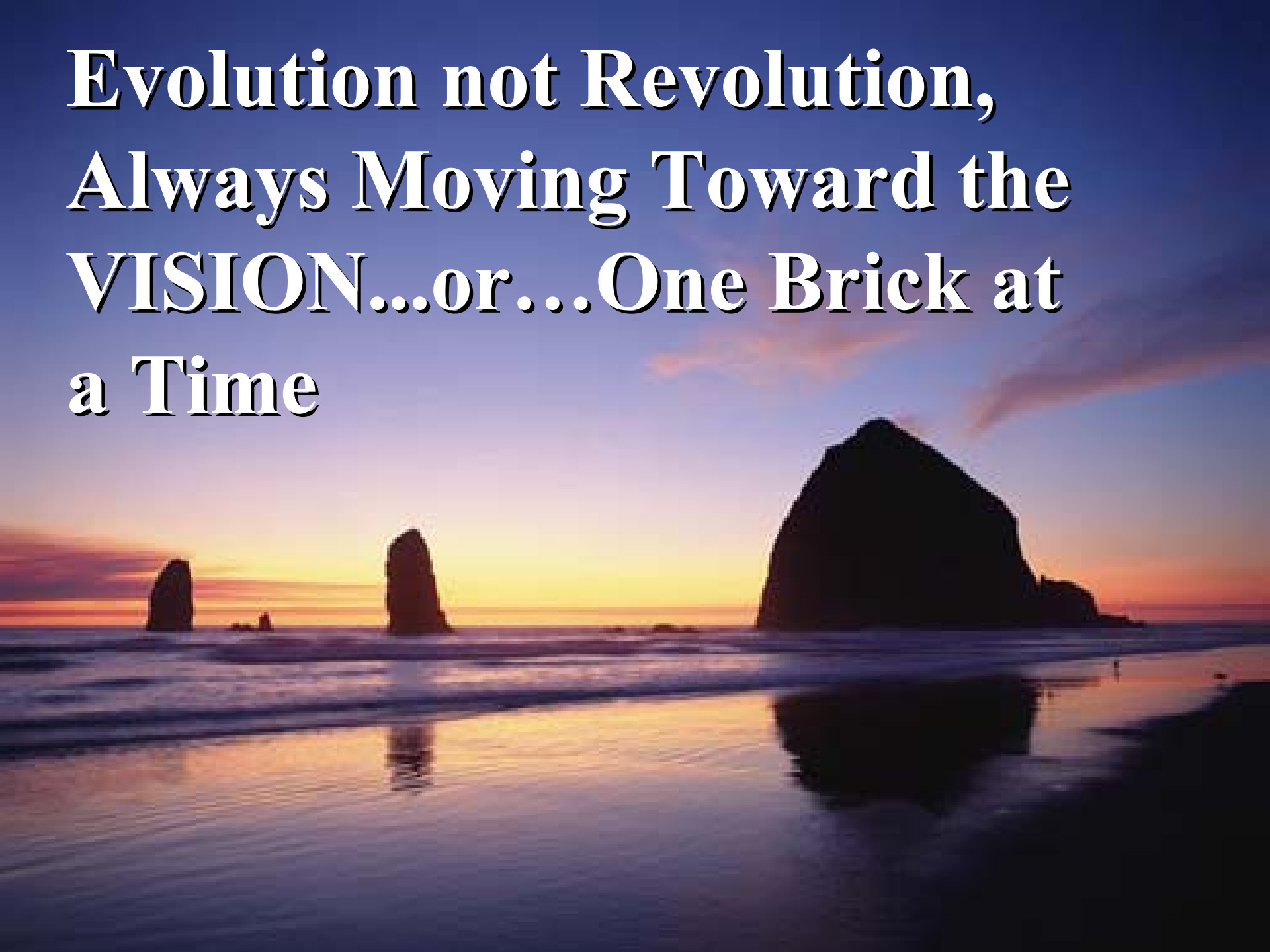
- Expand Standards for Desktops, Portable/Mobile Devices, Servers, Operating Systems, and Office Automation Software to Support Business Needs
- Maintain and Enhance Network Capabilities to Support Multi-Media Needs
- Maintain and Enhance Redundant and Fault Tolerant Environment

Operational Architecture Strategies (Continued)

- Maintain and Enhance Network Security
- Maintain and Enhance Infrastructure to Support E-Business Expansion
- Expand Voice over Internet Protocol (VoIP)
- Maintain and Enhance Wireless Support
- Expand Video and Video Conferencing Capabilities
- Expand Convergence Technologies
- Implement Portal – Tailored to Job Function

The Plan…

- Identify and Define IT Opportunities in the Context of the "TO BE" Business Model: Application, Information, and Operational Architectures and Strategies
- Use the Normal Procurement Processes to Evolve Toward the VISION
- RFP Statements to Ensure Conformance to VISION and Standards
- Review, Recommend and Quality Assure Responses, Proposals, and Hardware/ Software to Ensure Conformance to VISION and Standards


Evolution not Revolution, Always Moving Toward the VISION...or…One Brick at a Time

The End

Detail Technical Slides

- Slides that follow are not part of the high level presentation, but can be used to enhance a more technical presentation and in sequence by reference in the main presentation

VISION Features:

State Enterprise Initiatives/Architectures

- Stay compliant with Statewide policies, guidelines, and standards
- Participate in development
- Initiate when needed
- Keep leadership position

VISION Features:

Pre-Screen Application:

- Socratic Questioner/Expert System
- Browser based-Internet/Intranet
- Client choice results
- Apply or not
- Facilities
- Documents needed
- Locations for service
- Directions to and from services center
- Transportation resources
- Electronic referral/availability

VISION Features:

Leverage legacy systems

- Leverage investment
- Front end with electronic referral and data sharing across programs or program cluster
- Browser enhanced
- Pre-verified data
- Expand use of data warehouse environment as the reporting system

VISION Features:

Application Development System

- Component driven/modular development
- Object oriented libraries
- Web Services libraries
- Data access libraries
- Reusable source
- Reusable object
- Object broker
- Policies/standards requiring use and enhancement
- 3-Tier designs – presentation, business application, data base. Capable of running on 3 Separate Servers in 3 Separate Locations

VISION Features:

Customer/Client Authentication System – to be used by all systems

- Access and verification to all State and federal systems
- Name, address, SS# verification
- Earnings and benefits, information verification
- Asset information verification
- Current/past State program
- Wants/warrants
- AKA identification
- Customer/client index to all systems
- Data quality assurance before entering any system
- Single source of customer/client data

VISION Features:

Provider Authentication System – to be used by all systems

- Access and verification to all State and federal systems
- Name, address, SS# verification
- Earnings and benefits, information verification
- Incorporation data
- Provider index to all systems
- Data quality assurance before entering any system
- Single source of provider data

VISION Features:

Data Availability Subsystem

- Availability to all systems
- Address standardization and verification technologies
- Pre-verified data available to pre-fill screens

VISION Features:
Eligibility System

- Component driven
- Reuse common eligibility components
- Tailored automatically by job function to specific program or program cluster

VISION Features:

Case Management System

- Build on common process framework
- Component driven
- Reuse common case management components
- Tailored automatically by job function to specific program or program cluster

VISION Features:

Claims Processing System

- Component driven
- Reuse common claims processing components
- Tailored to job function
- Integrated to statewide GMIS

VISION Features:

Document Management System

- Workflow driven
- Electronic signature
- Access from anywhere
- Multiple version control
- Records management compliant
- Internet/Intranet accessible

VISION Features:

Data Warehouse

- Access to all FSSA, local, state, federal and business partners information
- Data models of systems and data stores
- Access to information via ETL tools
- Reporting
- Analysis
- Decision support
- Digital dashboard
- Web publishing
- Web access
- Fraud detection
- Secure but sharable
- Enterprise leadership and compliance

VISION Features:

Job Function Driven Portal

- Single sign on
- Access from anywhere—
  office, Internet, mobile, home
- Applications tailored by user job function
- Access to all information needed to do job
- Customizable

VISION Features:

Desktop

- Microsoft Office
- Access to all applications
- Access to all information needed
- Convergence capable
- Video capable
- Imaging/document flow capable
- Voice over IP capable
- Customer friendly

VISION Features:

Network

- High performance
- Wired and wireless
- Mobile computing support
- Redundant – no single point of failure
- Scalable
- Video capable
- Imaging/document flow capable
- Voice over IP capable
- Convergence capable

VISION Features:

Platform/Server Environment

- Consolidation to reduce support cost and add flexibility
- Virtual server environment
- Support 3 tiered applications
- Access/gateways/emulation to all systems
- Fault tolerant
- Centrally managed
- Redundant
- Scalable
- Mirrored
- RAID
- SAN